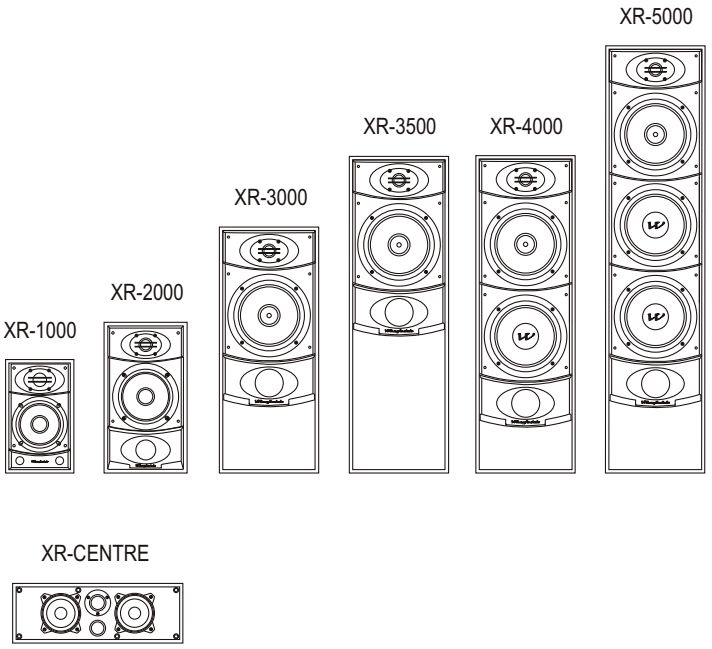
# XARUS
# Series
## Instruction Manual







Wharfedale

BRITAIN'S MOST FAMOUS LOUDSPEAKERS

## Introduction

The Wharfedale Xarus Series is a range of versatile loudspeakers using advanced materials and the latest precision drive units. The XR 1000, XR 2000 and XR 3000 are small stand mounting loudspeakers. The XR 3500, XR 4000 and XR 5000 are floor-standing models. The range includes a centre channel, XR CEN. The XR 1000 and XR 2000 may be used as either surround sound speakers in Home Theatre applications, or as the main speakers in a small stereo system. To complement your system, choose from our range of Powercube powered subwoofers for the perfect Home Cinema experience. Thank you for purchasing Wharfedale. We hope your loudspeakers will give you a rewarding listening experience for many years .

**Please read these instructions carefully before installing your Wharfedale loudspeakers.**

Before making connections to any part of your sound system make sure the amplifier and all connected sources are switched off.

When you switch on your system or change sources, set the volume control to minimum and turn up the level gradually.

DO NOT use your amplifier at full volume. The position of the Volume Control is NOT a reliable guide as to the maximum volume level or capabilities of your sound system. Playing the system with extreme high settings of volume and tone controls will result in distorted sound and may damage the amplifier and loudspeakers.

DO NOT connect loudspeaker terminals to the mains supply.

Ensure that all loudspeakers in the system are correctly wired and are in phase.

DO NOT subject your loudspeakers to excessive cold, heat, humidity or sunlight.

WARNING: To reduce the risk of fire or electrical shock do not expose this product to rain or moisture. The product must not be exposed to dripping and splashing and no object filled with liquids such as a vase of flowers should be placed on the product.

No naked flame sources - such as candles - must be placed on the product.

DO NOT place heavy objects on top of loudspeaker cabinets.

NEVER let anyone, especially children push anything into holes, slots or other opening in the case.

NEVER touch the drive units which are easily damaged. If you wish to play your loudspeakers with their grilles removed be careful to protect the drive units from children and pets.

DO NOT use makeshift stands. Always fit a manufacturer's approved stand according to the instructions and using the fixings provided. Your dealer will advise you.

# Preparing and connecting Your Loudspeakers

## Unpacking the Speakers

Carefully remove each loudspeaker from its packing carton. Be especially careful when removing the polythene bag.

DO NOT attempt to lift the loudspeaker by the polythene bag.

Retain the packing for future use. If you decide to dispose of the packing, please do so safely.

## Stands and Brackets Stands and Brackets

The XR 1000, XR 2000 and XR 3000 are suitable for stand mounting. The quality of loudspeaker stands makes a considerable difference to the performance of your loudspeakers so do not use flimsy inferior products.

The XR1000 and XR2000 can be mounted on walls or even sturdy shelves.

The XR1000 and XR2000 are provided with 'Keyhole slots' for wall mounting.

Please ensure they are out of reach of children .

Ensure that the wall is sound and can support the product. Drill 5mm holes in the wall. Fix a suitable No 8 round head screw firmly into each hole using wall plugs appropriate for this purpose. Leave a stub of 5mm protruding from the wall. Align the hole in the mounting bracket over the screw head and carefully lower the unit onto the screw.

## XR CEN Centre Channel Loudspeaker

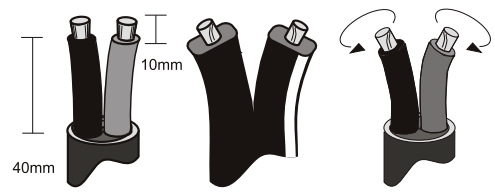
A set of self adhesive pads is provided. Peel off the backing material and fix a pad close to each corner of the bottom surface of the loudspeaker.

## Choosing and Preparing Cables

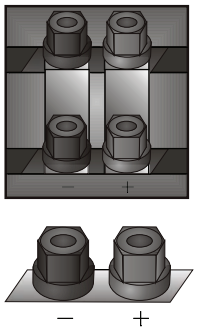
Specialist audio cable usually offers better performance than general purpose 'bell' or 'zip' wire.

Choose a cable of suitable diameter - cable that is too thin will limit the dynamics of the sound and may impair the bass response. Audio cable is polarised, with two cores of different colours, or often a raised rib or coloured tracer in the case of twin cable.

Split the twin cores to a depth of about 40mm. Carefully strip the insulation from each end, leaving about 10mm of bare wire. If the cable is stranded, lightly twist to gather any loose strands.




## Crossover Networks




Most Xarus loudspeakers use a specially designed bi-wireable crossover panel with four terminal binding posts. Please follow the drawing carefully to see the correct orientation of the loudspeaker terminals. The upper terminals connect to the treble unit, the lower pair to the bass unit. As supplied, the treble terminal pair is connected to the bass terminal pair via removable metal straps. These should be left in place for standard installations.

The Xarus 1000, 2000 and centre speaker use a conventional twin terminal crossover panel.

## Connecting Loudspeaker Terminals

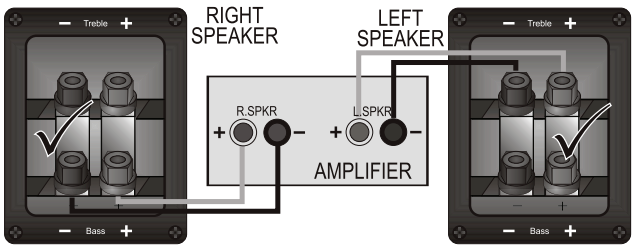
Unscrew the terminal. Thread the bared end of each cable through the hole in the bottom of theterminal post. Ensure that there are no loose strands which may touch adjacent terminals. Retighten the terminal securely. The drawing above illustrates the method.

**NOTE**: When connecting loudspeakers, the cables to left and right channels should be of equal length, regardless of the distance of the speakers from the amplifier. This applies to front and rear channels.

## Connecting Your Loudspeakers-Standard Connections

Choose a suitable length of twin core speaker cable for each channel, and prepare the ends as described above. Unscrew each terminal a few turns but leave the straps in place.

Connect the red, positive (+) terminal of the Left loudspeaker to the corresponding red, positive (+) amplifier terminal. Connect the black, negative (-) terminals similarly. Tighten the terminals securely. Repeat this procedure for the Right Channel.

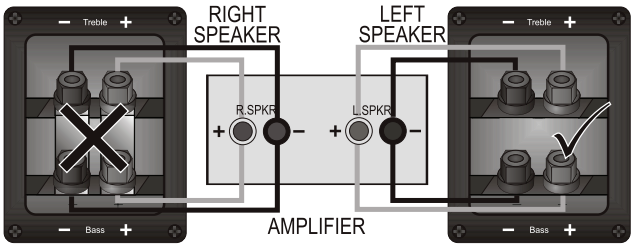


## Connecting Your Loudspeakers -Bi-Wiring

Using separate cables for treble and bass units in a Bi-Wiring configuration reduces intermodulation effects and improves headroom and clarity. To bi-wire, you will need to install two lengths of twin core cable between the amplifier and each loudspeaker.

Unscrew each terminal a few turns and remove the metal straps. Connect the cables between the amplifier and the loudspeakers as indicated above and re-tighten all the terminals securely.

**Note:** Some amplifiers have two pairs of output terminals to facilitate bi-wiring but this is not essential. The advantages of bi-wiring are fully retained if your amplifier has only one pair of output terminals per channel (as in the illustration).

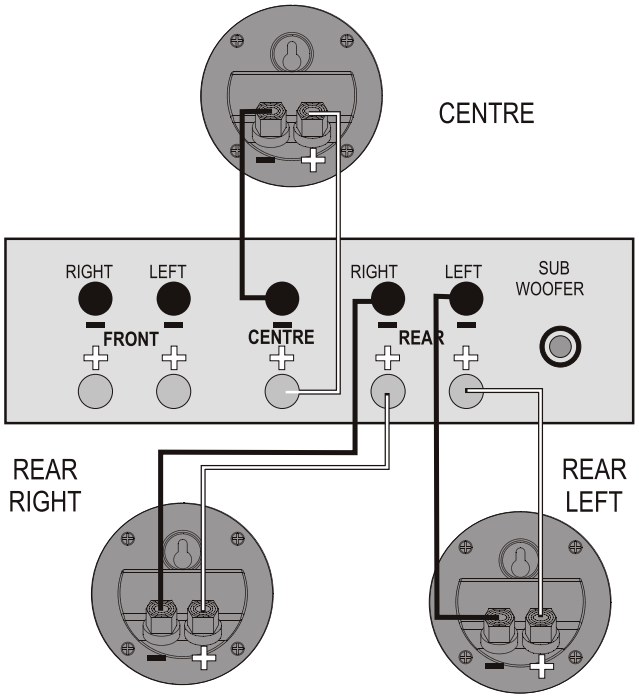



## Bi-Amplifying (Bi-Amping)

By connecting each loudspeaker drive unit to its own dedicated amplifier the advantages of Bi-Wiring can be extended. If you own two identical stereo power amplifiers, your Crystal speakers may be Bi-Amped. For further details please consult your dealer.

## Centre Channel and Surround Connections

The XR CEN and rear surround loudspeakers are intended for use specifically with Audio Visual equipment having Centre and Rear loudspeaker outputs. Connect these loudspeakers as shown, again observing polarity. The speakers may be connected as shown, or bi-wired.

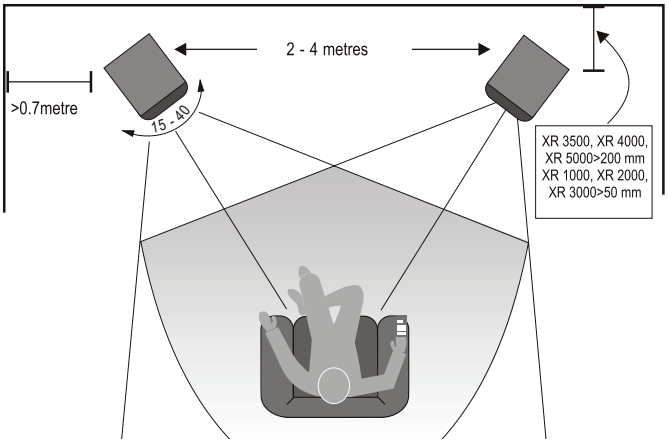



# Positioning Your Loudspeakers

## Conventional Loudspeakers

Models XR 3500, XR 4000 and XR 5000 are designed to be floor standing. We suggest that they are positioned at least 200mmfrom the rear walls and 700mmfrom the side walls, facing slightly inwards. Models XR 1000, XR 2000 and XR 3000 should ideally be stand or wall mounted though they may be placed on a rigid shelf. The bass extension will improve if these speakers are operated closer to the rear walls. A useful rule of thumb is that the listener should be as far from the loudspeakers as they are from each other.

If the loudspeakers are placed too close to the walls the bass will increase but may be boomy and indistinct. If the loudspeakers are placed further away from the walls, the inward angle may be increased by up to 40%, although this may restrict the width of the optimum listening position. The speakers should ideally be positioned so that the treble units are roughly at ear level to a seated listener. As personal taste plays a large role, experiment with different configurations and play a wide range of programmes before finalising the position of your speakers.

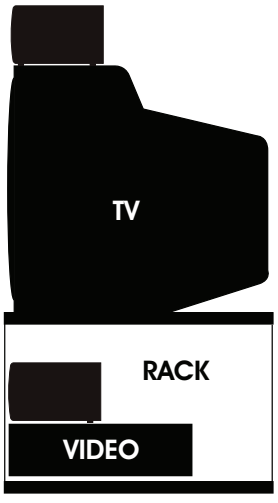



## XR CEN Centre Loudspeaker

The loudspeaker should be positioned centrally between the loudspeakers close to the television and mounted either above or below the screen.

The loudspeaker should be located on a stable flat surface to avoid any danger of the cabinet moving when it is vibrated by high sound levels. If you mount the unit on top of the television, move it forward so that the front grilles are level with or slightly in front of the screen. This will reduce reflections from the screen and the top of the cabinet.

Although you can place the centre channel loudspeaker under the TV monitor, this should always be regarded as second best. The preferred position is always above the monitor, as shown. The XR CEN uses screened drive units and may be placed close to a TV screen without ill-effects. Conventional loudspeakers should not be operated within 500mm of a TV screen as the drive unit magnets may interfere with the picture and cause colour distortion.




### Caution-Connecting Wires

When connecting your loudspeakers, avoid trailing cables across open floor spaces where they can be a source of danger.

Route cables safely under carpets or along room boundaries.

## Troubleshoothing

If your system appears not to be working as well as you expect, the following notes may be of some help.

Before investigating the cause of a problem, always switch off the system at the mains.

Please bear in mind that Home Theatre systems can be quite complex and there is often a variety of factors involved.

Please read this manual together with all the manuals concerning the rest of your system.

If, having attempted to resolve the problem, the trouble still persists, consult your dealer for assistance.

Do NOT try to remove any covers on the product or attempt to dismantle it in any way. There are no user serviceable parts inside and you will invalidate any warranty.

| Symptom | Possible Cause |
|---|---|
| No Sound | System not switched on<br>Wrong source selected |
| Sound lacks bass content<br>Bass reproduction muddy or indistinct | Loudspeakers wired incorrectly<br>Front speakers set to 'Smal' with no subwoofer connected |
| Excessive bass distortion at low volume levels | Bass level set too high<br>LFE level set too high |
| Excessive or distorted bas at high volume leves | System level set too high<br>Front loudspeakers or subwoofer too close to room corners |
| Distorted or rattling sounds at high volume leves | System level set too high<br>Objects placed on Front loudspeakers or subwoofer |
| Popping sounds or thumps from Front speaker or subwoofer | System level set too high<br>LFE level set too high: Subwoofer level set too high |
| Indistinct sound<br>Poor localisation of effects | One or more loudspeakers is out of phase<br>(See the relevant pages of this manual for the correct connection procedure) |
| Television picture is distorted or there is colour distortion | Front loudspeakers or subwoofer too close to the TV. (Switch off the system and TV. Move loudspeaker away. Leave 15 mins. Switch on again) |

**Fruther help and advice**

A wide range of AV and audio topics can be found at the Wharfedale web site.

**www.wharfedale.co.uk**

Home Theater is discussed in depth at the Dolby Laboratories web site.

**www.dolby.com**

The Digital Theater Systems web site is also full of interest and worth a visit.

**ww.dtsonline.com**

# Specifications

| | XR-CENTRE | XR-1000 | XR-2000 | XR-3000 | XR-3500 | XR-4000 | XR-5000 |
|---|---|---|---|---|---|---|---|
| Recommended Amplifier power | 15-150 W | 15-150 W | 15-150 W | 15-170 W | 15-170 W | 20-200 W | 25-250 W |
| Nominal Impedance | 6 ohms | 6 ohms | 6 ohms | 6 ohms | 6 ohms | 6 ohms | 6 ohms |
| Sensitivity at 1m for 2.83v input | 89 dB | 87 dB | 88 dB | 88 dB | 90 dB | 90 dB | 90 dB |
| Freq. Response | 80Hz - 20kHz | 60Hz - 20kHz | 55Hz - 20kHz | 50Hz - 20kHz | 45Hz - 20kHz | 40Hz - 20kHz | 30Hz - 20kHz |
| Dimensions H x W x D mm<br>H x W x D inches | 150x430x170<br>5.9x16.9x6.7 | 286x172x192<br>11.3x6.8x7.6 | 380x210x225<br>15.0x8.3x8.9 | 620x250x290<br>24.4x9.8x11.4 | 800x250x290<br>31.5x9.8x11.4 | 800x250x290<br>31.5x9.8x11.4 | 1080x250x290<br>42.6x9.8x11.4 |
| Drive Units | 100mm bass/mid unit with polymerised fibre cone 25mm dome tweeter with Ferrofluid | 125mm bass/mid unit with polymerised fibre cone 25mm dome tweeter with Ferrofluid | 125mm bass/mid unit with polymerised fibre cone 25mm dome tweeter with Ferrofluid | 200mm bass/mid unit , with polymerised fibre cone 25mm dome tweeter with Ferrofluid | 200mm bass/mid unit, with polymerised fibre cone 25mm dome tweeter with Ferrofluid | 200mm bass units, 200mm mid units Both with Polymerised fibre Cone 25mm dome tweeter With Ferrofluid | 2x200mm bass units, 200mm mid unit Both with plymerised fibre cone 25mm dome tweeter with Ferrofluid |

Wharfedale Xarus loudspeakers are compatible with 4 and 8 Ohm amplifiers

# Service & Information

Product service enquiries should, in the first instance, be referred to the supplying dealer. In cases of difficulty or for other product enquiries please contact the appointed Wharfedale distributor for the country.

For information on other authorised service centres worldwide contact Wharfedale International in the U.K. A worldwide distributor list is available on the Wharfedale website:
www.wharfedale.co.uk

### UK

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1932

Wharfedale

Loudspeaker Manufacturers since 1932

In 1932, when Gilbert Briggs founded the Wharfedale Wireless Works, his company was at the leading edge of an exciting new technology which was dedicated to bringing the pleasure of music and entertainment to a wide range of people. As the technology advanced Wharfedale gave many music lovers their first taste of High Fidelity, mounting a series of live sound demonstrations which excited the audio world and heralded the era of the modern hi-fi loudspeaker.

Today Wharfedale still takes the same uncompromising approach to the design and manufacture of every loudspeaker system, using high quality components and state-of-the-art testing to ensure consistently high performance. And that means that you can continue to count on the quality of all Wharfedale products.

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Wharfedale has a policy of continuous product development and reserves the right to change specification without notice.
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